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A STUDY OF SHARE-RENTED DAIRY FARMS IN GREEN COUNTY, WIS., AND KANE COUNTY, ILL.

By E. A. BOEGER, *Agriculturist.*

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The great increase in American dairy farming and the spread of farm tenancy in dairy regions together tend to emphasize the need for exact knowledge concerning the relation between landlord and tenant on share-rented dairy farms. The work described in this bulletin was undertaken in two representative dairy regions with a view to ascertaining the nature of this relationship and determining the profits made thereunder by landlord and tenant.

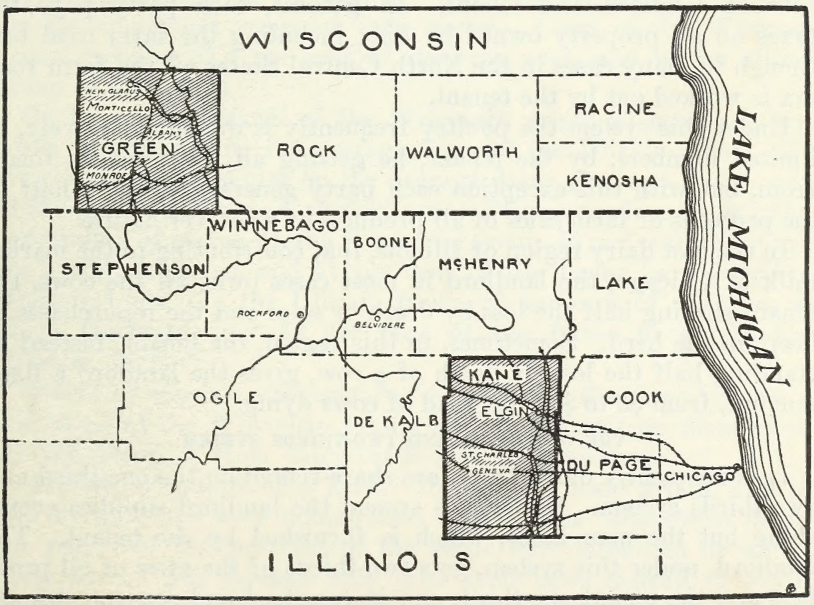

FIG. 1.—Location of areas in which records were taken.

Each of the regions selected for this study is a comparatively old dairy section. The one is in Green County, Wis., where dairying was first started for the manufacture of Swiss cheese, and the other about Elgin, Ill., where the first impetus to dairying was the establishment of butter factories (see fig. 1). In the former region, the supplying of milk to condenseries is now encroaching on the cheese industry, while in the latter region nearly all of the milk is either sold for condensation or to the Chicago market.

The material for this study was obtained from 84 farm management survey records taken in the Wisconsin region in cooperation with the State Agricultural College and Experiment Station, and from 59 records taken in the Illinois region, all for the crop year 1915. Reference is made also herein to some of the facts obtained from 147 survey records taken by the Illinois Agricultural College and Experiment Station for the crop year 1912 in the same region of this State.

SYSTEMS OF SHARE RENTING.

THE HALF-AND-HALF SYSTEM.

The most common system of share rent of dairy farms in the regions studied, as elsewhere, is the so-called half-and-half system. Under this system the landlord furnishes land, buildings, the greater part of the seed and fertilizer, and half the productive stock, while the tenant furnishes horses, machinery, half the productive stock, part of the seed, and sometimes part of the fertilizer. All stock on these farms is fed usually from the grain and hay owned in common, and if feed of any kind is bought its cost is shared equally between landlord and tenant. In general, each party pays the taxes on all property owned by him, including the farm road tax, though in many cases in the North Central States all the farm road tax is worked out by the tenant.

Under this system the poultry frequently is owned exclusively, in limited numbers, by the tenant, he getting all the proceeds therefrom, but with this exception each party generally receives half of the proceeds of farm sales of all products of whatever nature.

In the best dairy region of Illinois, that contributing to the market milk of Chicago, the landlord in most cases owns all the cows, the tenant sharing half the loss by death or sales and the repurchases to keep up the herd. Sometimes, in this region, the tenant, instead of standing half the loss by death of a cow, gives the landlord a fixed amount, from $5 to $15 per head of cows dying.

THE ONE-THIRD AND TWO-THIRDS SYSTEM.

Less frequently dairy farms are share-rented on the one-third and two-thirds system. Under this system the landlord supplies everything but the man labor, which is furnished by the tenant. The landlord, under this system, gets two-thirds of the sales of all products and the tenant one-third, and in case feed and concentrates are purchased, the tenant pays one-third their cost.

SUMMARY OF RESULTS.

Following is a brief summary of the salient facts developed by this study and of the conclusions drawn from its results. While these facts and conclusions are believed to be very generally true of the regions studied, they are advanced here as being applicable only to the 143 representative farms surveyed.

CONDITIONS AND METHODS.

Variation in terms of rental.—With regard to what is furnished by the landlord, the chief difference between the farms of the Wisconsin group and those of the Illinois group is that in the Illinois group, in general, the landlord owns the cows and pays all the farm road tax, while in the Wisconsin group he owns but half the cows and pays only part of the road tax. The twine and thrashing bill is usually divided half and half in each region, but in the Wisconsin group the tenant more frequently pays the entire bill than does the Illinois tenant.

Length of lease period.—In the Wisconsin group, 76 per cent of the leases run for one year only, none being for a longer period than 3 years. In the Illinois group, 63 per cent of the leases are for 1 year and none for a longer period than 5 years. In the Wisconsin group 36 per cent and in the Illinois group 27 per cent of the leases are verbal.

Size and type of farm.—The average size of farm in the Wisconsin group is 201 acres, of which 140 is tillable and 84 in pasture. The average size of farm in the Illinois group is 184 acres, of which 139 is tillable and 58 in pasture. Corn, oats, timothy, and clover are the important crops of each region. Corn in the Wisconsin group occupies 37.4 per cent of the crop area, and in the Illinois group 51.4 per cent.

On the average farm of the Wisconsin group 25 cows are kept, while 43 are kept on the average farm of the Illinois group. The Wisconsin cows produce on the average dairy products to the value of $70 per head per year, while those of Illinois produce $94 worth.

Breeding of cows.—In the Wisconsin group, 74 per cent of the cows are grade Holsteins, and 51 per cent of the farms have pure-bred Holstein bulls. In the Illinois group, 56 per cent of the cows are grade Holsteins, and 53 per cent of the farms have pure-bred Holstein bulls.

Source of income.—Seventy-five per cent of the farm income on the farms of the Wisconsin group, and 85 per cent on those of the Illinois group, is from dairy cattle and their products.

Methods of maintaining herd.—In the Wisconsin group, 21.5 per cent of the cows were home-raised heifers that came fresh during the year, and 18.9 per cent of the herds were discarded or sold as dairy cows. The farmers here raise their cows instead of buying them. In the Illinois group, 8 per cent of the cows were home-raised

heifers with first calves, while 28.1 per cent of the herds were discarded, indicating that this is a dairy-cow purchasing region.

FACTORS INFLUENCING PROFITS.

Disposition of milk.—In the Wisconsin group, both landlord and tenant make least on farms selling butter fat, more on farms marketing milk through the cheese factory, and most on farms selling milk to condenseries. In the Illinois group, none of the milk was made into cheese and the profits were about the same, both to landlord and tenant, whether the milk was sold to the condensery or for market.

Breeding of cows.—The introduction of pure-bred cows in the dairy herd in the Wisconsin group is very profitable both to landlord and tenant, but it seems to be profitable only to the tenant in the Illinois group.

Length of tenure and of lease period.—In both the Wisconsin and Illinois groups the tenant remained on the farm longer under the yearly lease than he did where the lease was for a longer period.

REGIONS STUDIED.

GREEN COUNTY, WIS.

The counties ranking highest in dairy products in Wisconsin, according to the last census, are, in order, Dodge, Sheboygan, Dane, Walworth, and Green. However, in average sales of dairy products per farm, Green County, with $763, is the highest for the State. Tenancy in Green County is 28.6 per cent, of which about three-fifths is share. Nearly all the share-rented farms in this county are purely dairy farms and the rental system is well established. The landlord furnishes the land, buildings, half the cows and productive stock, most of the grass seed, pays about half the expense for thrashing and twine, sometimes all the road tax, and frequently furnishes the tenant fuel wood from the farm. The tenant furnishes the labor, horses, machinery, half the cows and other productive stock, sometimes part of the grass seed, and usually pays half the expense for thrashing and twine. On only 2 farms out of 84 did the landlord go to any expense for labor, in both of which cases he pays half the expense for hired labor. In all cases except two the horses, as well as the productive stock, are fed from grain and hay owned in common, half by each of the contracting parties. The proceeds from the sales of all farm products are divided equally between landlord and tenant, usually at the bank.

Dairy products are the principal source of income on the farms in Green as well as in many of the other counties of Wisconsin. In this county milk is marketed mostly at the condensery or through the cheese factory, and the haul usually is short. In a few cases, however, the haul to the condensery is 7 or 8 miles. The condenseries usually take nearly all the milk within a radius of about 3 miles

around them. Farmers who market their milk through the cheese factory usually have the cows freshen in the spring, and thus they produce most of their milk in the summer, while the cows are on pasture. In the winter, during December, January, and February, the cows are dry and the cheese factories are closed. On the other hand, the farmers who sell to the condensery usually have their cows freshen in the fall and aim to have them at the point of greatest production during January and February, when milk is highest in price. The cattle are on pasture usually from about May 10 to November 10. It is the general custom to sell such calves as are not raised at the age of from 2 to 4 weeks. More than enough cows to replenish the herd loss are raised, the surplus being sold to other dairy districts.

The data upon which is based the discussion in the following pages concerning Wisconsin farms were obtained in the winter of 1915–16 for the crop year 1915, in cooperation with the Wisconsin Agricultural College. Records were taken on 84 purely half-share-rented dairy farms.

KANE COUNTY, ILL.

This county ranks second in the State in production of dairy products, both as to total and as to average per farm, being outranked only by McHenry County, which lies just to the north of it. The average sales of dairy products per farm for McHenry County in 1909 were $1,064, and for Kane County $1,051. In 1909, 46.1 per cent of the farms of Kane County were rented, about one-third of them on shares.

These counties are in the famous Fox River or Elgin district, where dairying had its impetus years ago in the manufacture of creamery butter. Now the chief sources of revenue from milk are the condensery and the Chicago market.

In Kane County, on share-rented dairy farms, the landlord furnishes the land, buildings, usually all the cows, half the other productive stock, usually half the grass seed, and pays half the expense for thrashing and twine. Here the landlord also pays the road tax in cash, with his other real estate taxes. The tenant supplies the labor, horses, machinery, half the productive stock except cows, sometimes half the grass seed, and pays half the expense for thrashing and twine. He usually must pay half the loss on cows, whether by death or by sale of unsatisfactory cows and the purchase of others in their stead. Frequently the tenant does not bear half the loss on the death of a cow, but is under agreement on such occasions to pay the landlord a specified amount, ranging from $5 to $15. Loss or gain on the bull, generally gain, is shared equally. Often the bull is loaned to the partnership by a cattle dealer for his keep.

Some tenants have the privilege of raising one colt, but sometimes when colts are raised the tenant must turn into the herd one heifer

for each colt. The receipts from sales of all farm products are divided half and half, excepting sometimes those from fowls, which frequently are owned in a limited number exclusively by the tenant. All stock is fed from grain and hay owned in common.

Dairying in this region is of the intensive type. As will be seen later, few cows are raised and the calves usually are sold almost as soon as the mother's milk is marketable.

Fifty-nine records were taken in the region about Elgin, mostly in Kane County, for the crop year 1915. The data thus procured will be discussed in these pages, and reference will be made also to the data secured from 147 share-rented farms for the crop year 1912 by the Illinois Agricultural College, and loaned to the Federal department for use in this connection.

Figure 1 shows the locations in which these records were taken.

VARIATION IN DUTY OF LANDLORD AND OF TENANT.

Considerable variation was encountered in the duty of landlord and of tenant under the terms of the various contracts found in vogue (see Table I).

TABLE I.—*Items furnished by landlord and by tenant on 143 half-share rented dairy farms in Wisconsin and Illinois.*

[Figures show number of farms on which each specified item was furnished.]

Item.	Green County, Wis. (84 farms).			Kane County, Ill. (59 farms).		
	By landlord.	By tenant.	Half and half.	By landlord.	By tenant.	Half and half.
Horses	1	67	16	.....	59	.....
Machinery	3	70	11	.....	56	3
Cows	3	.....	81	49	.....	10
Grass seed	51	1	32	26	.....	33
Road tax	31	51	2	59	.....	.....
Twine	.....	19	65	3	2	54
Thrashing	.....	15	69	.....	2	57
Chickens	4	25	55	1	21	34
Milk cans [1]	2	72	10	3	13	37

[1] On the other 6 farms in the Illinois region the milk cans were furnished by the milk buyer.

It will be noted from the table that on the farms of the Wisconsin group the horses are owned mostly by the tenants and on those of the Illinois group they are all owned by the tenants. Likewise, the implements and machinery are owned mostly by the tenant, but to a greater extent on the farms of the Illinois group than those of the Wisconsin group.

The greatest variation in the division of expenses is in regard to cows and the payment of the farm road tax. In the Wisconsin group only three of the landlords own cows, and they are owned half-and-half on 81 farms, while in the Illinois group they are owned by the landlord on 49 farms and half-and-half on only 10 farms. As

stated previously, when the cows are owned by the landlord the tenant shares half the loss through sales and purchases, and either half the loss by death or a fixed amount ranging from $5 to $15 per cow.

On the 147 farms in this region from which records were taken by the Illinois station for the crop year 1912 in 139 cases the horses were supplied by the tenant and in 8 cases they were owned half-and-half. The machinery was owned in 126 cases by the tenant and in 21 cases half-and-half, and the cows were owned in 130 cases by the landlord, in 2 cases by the tenant, and in 15 cases half-and-half. The expenses for seed, thrashing, and twine in 1912 also were borne in about the same ratio as exhibited in Table I. Thus it would appear that the relation between landlord and tenant in this region has not changed materially during the last four years.

Under the type of lease most commonly found the duties and remuneration of the landlord and of the tenant, respectively, may be roughly outlined, first for the Wisconsin group, and then for the Illinois group, as follows:

Duties and remuneration of landlord and tenant, respectively.

WISCONSIN GROUP

Landlord:

Receives—

Half the returns from all farm products sold.

Pays—

Depreciation on buildings and on half the cows.
For repairs on buildings and fences and material for repairs.
Taxes on land, buildings, and on half the productive stock.
Insurance on farm buildings and on half the cows and other productive stock.
Half the cost of thrashing and twine.
For most of the grass seed.
Part of the road tax.
For half of the feed purchased.

Tenant:

Receives—

Half the returns from all farm products sold.

Pays—

Cost of all farm labor.
For all work stock, machinery, and tools.
For labor for rough repairs to buildings and fences.
Taxes and insurance on horses and machinery, and on half the productive stock, including cows.
Depreciation and repairs on machinery and tools.
Depreciation on horses and half that on cows.
Most of the farm road tax.
For half of the feed purchased.
For part of the grass seed.
Half the cost of thrashing and twine.
Cost of milk cans.

ILLINOIS GROUP.

Landlord:

Receives—

Half the returns from all farm products sold.

Pays—

Depreciation on buildings and on half the cows.
For repairs on buildings and fences and materials for repairs.
Taxes on land, buildings, cows, and half of other productive stock.
Insurance on farm buildings and on half the productive stock.
For most of the grass seed.
Half the cost of thrashing and twine.
All of the road tax.
For half of the feed purchased.
For part of the milk cans.

Tenant:

Receives—

Half the returns from all farm products sold.

Pays—

Cost of all farm labor.
For all work stock, machinery and tools.
For labor for rough repairs to building and fences.
Taxes and insurance on horses and machinery and on half the productive stock, except cows.
Depreciation and repairs on machinery and tools.
Depreciation on horses and half that on cows.
For half the feed purchased.
For part of the grass seed.
Half the cost of thrashing and twine.
For most of the milk cans.

FACTORS OF EFFICIENCY.

LENGTH OF LEASE PERIOD AND CHARACTER OF LEASE.

TABLE II.—*Length of lease period and character of lease.*

Item.	Length of lease period.			
	1 year.	2 years.	3 years.	5 years.
Number of Wisconsin dairy farms (total 84)	64	6	14	.....
Percentage of all leases	76	7	17	.....
Number of verbal leases	29	.....	1	.....
Number of Illinois dairy farms (total 59)	37	1	13	8
Percentage of all leases	63	2	22	14
Number of verbal leases	16	.....	.....	.....

As will be seen from Table II, most of the leases on the farms of both groups are for 1 year; in the Wisconsin group none are for a longer period than 3 years, and in the Illinois group none for a longer period than 5 years. About one-third of the leases on the farms of the Wisconsin group and about one-fourth of those in the Illinois group are verbal. In general, these leases are automatically renewed unless one of the parties gives notice to the contrary.

BREED OF COWS.

TABLE III.—*Breed of cows.*

Item.	84 Green County, Wis., farms.		59 Kane County, Ill., farms.	
	Number of farms.	Per cent of all farms.	Number of farms.	Per cent of all farms.
Farms having all pure-bred cows (all Holstein)	3	4	.....	.....
Farms having part pure-bred cows	9	11	4	7
Farms having grade Holstein cows	62	74	33	56
Farms having cows of mixed grade	10	12	22	37
Farms having pure-bred bulls	46	55	31	53
Farms having pure-bred Holstein bulls	43	51	31	53

From Table III it is seen that on a few of the farms of the Wisconsin group the cows are all pure bred, while on none of those of the Illinois group are they all pure bred. The dominant breed of cow in both regions is the Holstein and more than half of the farms in the groups from each State have pure-bred Holstein bulls.

SOURCES OF INCOME.

The regions in which these records were taken are distinctly dairy regions. Though on some of the Wisconsin farms studied a large part of the farm income is derived from the sale of hogs, in no other section of the United States, with the probable exception of several New York and New Jersey counties, is the farm income so largely derived from the sale of dairy products as in the regions under discussion. The extent to which the farm income is dependent on dairy products in this region will be seen from Table IV. For purposes of comparison the per cent of farm income from various products in several other regions is given.

TABLE IV.—*Sources of farm income on Wisconsin and Illinois share-rented dairy farms, compared with Illinois stock farms, Texas cotton farms, and Pennsylvania dairy farms.*

[Per cent of receipts.]

Sources of farm income.	Share-rented farms.			Cotton farms.	General.
	84 dairy farms in Green County, Wis.	59 dairy farms in Kane County, Ill.	124 dairy farms in Chester County, Pa.	115 farms in Ellis County, Tex.	73 central Illinois stock farms.
Dairy cattle and their products	75	85	54	0	3
Other stock	[1] 20	6	3	6	[2] 57
Poultry and eggs	2	2	8	0	2
Corn	0	0	2	2	19
Wheat	0	3	8	0	11
Oats	0	1	0	1	4
Rye	0	1	0	0	0
Hay	0	1	11	2	0
Potatoes	0	0	7	0	0
Cotton	0	0	0	86	0
Miscellaneous	3	1	7	3	4
Total	100	100	100	100	100

[1] From hogs, 19 per cent.

[2] From beef cattle, 24; hogs, 28; horses, 5 per cent.

Where zero appears after a source of income, the receipts from it were less than 1 per cent. Several other sources of income, the receipts from which were less than 1 per cent, are included in the miscellaneous receipts.

Seventy-five per cent and 85 per cent, respectively, of the farm income on the share-rented farms of Wisconsin and Illinois studied was from dairy cattle and their products, while but 54 per cent of the income from such farms in Chester County, Pa., was from this source. For comparison as to sources of income, the table shows that 86 per cent of the income from the average of 115 farms in Ellis County, Tex., is from the single crop, cotton, and that 57 per cent of the average of 73 central Illinois stock farms comes from live stock.

SIZE AND CROP AREAS OF FARMS.

TABLE V.—*Size and crop areas of farms.*

SIZE.

Item.	Average of 84 Wisconsin farms.		Average of 59 Illinois farms.	
	Acres.	Per cent of total area.	Acres.	Per cent of total area.
Land in farm	201	100	184	100
Tillable area	140	70	139	75
Land in pasture	84	42	58	32
Land in farmstead, woods, roads, etc	16	8	10	5
Land in crops	102	51	116	63

CROP AREA.

Crop.	Acres.	Per cent of crop area.	Acres.	Per cent of crop area.
Corn	38.2	37.4	59.6	51.4
Oats	21.7	21.2	23	19.9
Wheat	.4	.4	4.1	3.5
Rye	1.7	1.6	1.4	1.2
Barley	5.1	5	3.5	3
Timothy and clover	23.9	23.4	18.7	16.2
Alfalfa	9.3	9.1	5.2	4.5
Wild hay	1.2	1.2	.....	.....
Fruit (apples)	.3	.3	.2	.2
Potatoes	.2	.2	.2	.1
Total	102	100	116	100

The average size of the farms of the Wisconsin group is 17 acres greater than that of the farms of the Illinois group. (See Table V.) A greater percentage of the land in the Illinois group of farms is tillable and in crops and a less percentage is in pasture than on those of the Wisconsin group.

Corn is the chief crop in each area. The crops occupying the next greater acreages are hay and oats. In the Wisconsin area, 9.1 per cent of the crop area is in alfalfa, the limestone soils of the hilly sections of Green County being well adapted to this crop, while in the

Illinois area only 4.5 per cent of the crop area, or 5.2 acres per farm, was in alfalfa. In 1912, as shown by 147 records taken in the Illinois area by the Illinois station, the average area of alfalfa per farm was only 1.5 acres.

In general, the dairying practiced in the Illinois group is of a more intensive character than that practiced in the Wisconsin group, and much more feed and concentrates are purchased. The average feed bill on the Illinois farms was $656, or $11 per animal unit,[1] while that on the Wisconsin farms was only $182, or $3 per animal unit.

INVESTMENT AND EARNINGS.

TABLE VI.—*Comparison of average investment, earnings, etc.*

Item.	Average of 84 Wisconsin farms.	Average of 59 Illinois farms.	Item.	Average of 84 Wisconsin farms.	Average of 59 Illinois farms.
Value of real estate per acre	$128	$173	Monthly cost of man labor	$39.06	$36.06
Landlord's working capital	$2,169	$3,564	Months of man labor	24	33
Landlord's total capital	$27,852	$35,477	Crop acres per animal unit	2	1.9
Per cent earned on landlord's investment	3.9	4.6	Pasture acres per animal unit	1.6	1
Tenant's total capital	$3,184	$2,419	Age of tenant	34	41
Tenant's labor income[1]	$730	$1,023	Age of landlord	55	59
Cows per farm	25	43	Years farm has been rented	8.5	16.8
Dairy products per cow	$70	$94	Years tenant has rented	5.8	9.8
Cows per man	12.5	15.4	Years tenant has rented this farm	3.7	5.7

[1] In computing the labor incomes for this bulletin, interest at the rate of 5 per cent was allowed on the tenant's capital.

From Table VI it is seen that the average investment of the landlord per farm is greater in the Illinois group than in the Wisconsin group. The tenant's capital, however, is larger on the Wisconsin farms for the reason that in most cases he owns a half interest in the cows, whereas in Illinois he does not. In Wisconsin the landlord makes 3.9 per cent on his investment, in Illinois 4.6 per cent. The labor income of the tenant was likewise larger in the latter State ($1,023 as against $730). This greater profit to both landlord and tenant on the Illinois farms may be accounted for in part by the fact that the farm enterprise, although covering a smaller acreage, was larger on the average in the Illinois group than in the Wisconsin group and that in Illinois the farmers were in a market-milk selling region.

The reason the Illinois farmers have to buy more feed is seen in the fact of their having fewer crop acres and pasture acres per animal unit.

[1] An animal unit is a mature horse or cow or as many smaller animals as require the feed of a horse or cow, namely, 2 head of young cattle, 5 hogs, 7 sheep, or 100 hens.

ANNUAL CHANGES IN COWS.

TABLE VII.—*Sales, additions, and casualties affecting herds.*

	Average of herds on 84 Wisconsin farms (25 cows per farm).		Average of herds on 59 Illinois farms (45 cows per farm).	
	Number.	Per cent of herd.	Number.	Per cent of herd.
Added to herd:				
Heifers fresh during year	5.4	21.5	3.4	8.0
Cows bought	.7	2.8	9.6	22.2
Total	6.1	24.3	13.0	30.2
Removed from herd:				
Cows died	.3	1.2	.7	1.6
Cows sold	4.4	17.7	11.2	26.0
Total	4.7	18.9	11.9	27.6
Excess of additions over removals, or herd increase	1.4	5.4	1.1	2.6

From Table VII it is seen that a greater percentage of the herds were heifers that came fresh during the year on the farms of the Wisconsin group than on those of the Illinois group, and that a much larger percentage of the herd was bought and sold on the farms of the latter than on those of the former State. Many of the cows sold from the group of Wisconsin farms were good dairy cows, while those sold from the Illinois group of farms were mostly unprofitable milk producers.

The yearly percentage of deaths of dairy cows on 453 farms in Lenawee County, Mich., as determined by a farm management survey, was 1.7, and on 643 farms in Chester County, Pa., 1.3. These figures do not differ much from those for Wisconsin and Illinois groups under consideration. The proportion of cows discarded per year on the farms investigated in Lenawee County, Mich., was 21.6 per cent, and in Chester County, Pa., 23 per cent. These figures are greater than those for the Wisconsin group and less than those for the Illinois group. From the foregoing figures it is seen that the length of time the average cow remains in these herds is 5.3 years for the Wisconsin group, 4.6 years for the Michigan group, 4.3 years for the Pennsylvania group, and 3.6 years for the Illinois group.

RELATION OF FARM PRACTICES TO PROFITS.

INFLUENCE OF KIND OF DAIRY PRODUCTS SOLD ON PROFITS.

The source of income on the farms in both groups, as previously shown in Table IV, is mainly dairy products. Table VIII shows the profits of landlord and of tenant in relation to the kind of dairy products sold.

TABLE VIII.—*Relation of kind of dairy products sold to profits.*

[Average figures.]

Item.	84 Wisconsin farms.			59 Illinois farms.	
	3 farms selling butter fat.	49 farms selling milk to cheese factory.	32 farms selling milk to condensery.	33 farms selling market milk.	26 farms selling milk to condensery.
Average total capital	$22,496	$29,879	$33,609	$37,977	$37,794
Average size farms (acres)	179	206	195	182	187
Average number of cows	18	23	29	39	47
Average dairy receipts per cow	$56	$64	$77	$96	$91
Average receipts from hogs	$656	$795	$352	$147	$173
Tenant's average labor income	$413	$677	$842	$1,038	$1,004
Average per cent on landlord's investment	3.3	3.9	4	4.6	4.6

Both tenant's labor income and landlord's profits are least on the Wisconsin farms selling butter fat ($431 and 3.3 per cent), and most ($842 and 4 per cent) on the group of farms selling milk to the condensery. The per cent the landlord makes on his investment in the Illinois group is 4.6, both where the milk is sold on the market and where it is sold to the condensery, and the tenant's average labor income is practically the same in the two groups. None of the Illinois farms visited sold butter fat.

RELATION OF BREEDING OF COWS TO PROFITS.

Whether the cows are grade or pure bred is frequently the deciding factor in reference to profits on dairy farms. The influence of breeding on the profits of the landlord and of the tenant on these farms is shown in Table IX.

TABLE IX.—*Influence of breeding of cows on profit.*

Item.	84 Wisconsin farms.				59 Illinois farms.		
	3 farms with pure-bred Holstein cows.	9 farms with part pure-bred Holstein cows.	62 farms with grade Holstein cows.	10 farms with mixed or other grade cows.	3 farms with part pure-bred Holstein cows.	34 farms with grade Holstein cows.	22 farms with mixed or other grade cows.
Total capital	$42,615	$41,318	$30,652	$20,689	$38,279	$39,542	$35,301
Land in farms (acres)	163	206	205	186	148	192	176
Number of cows	22	33	25	20	33	43	43
Per cent of cows raised	20	26	20	15	19	9	5
Dairy receipts per cow	$99	$83	$69	$42	$103	$92	$96
Labor income	$1,368	$1,164	$716	$234	$1,059	$1,041	$989
Landlord's per cent on investment	5.7	5	3.6	2.8	3.7	4.6	4.8

In the Wisconsin area only three farms had pure-bred cattle exclusively, and in the Illinois area only three farms had part of the herd pure bred. This number, although averaged in the table in each case, is not great enough to give a reliable average. On two of

the three Illinois farms having part pure-bred cows, the land was valued particularly high and the business was comparatively smaller. For these reasons, the percentage on the landlord's investment appears low in the table. However, the labor income in the Wisconsin area rises from $234, on farms where mixed-grade cows are kept, gradually to $1,368 where all the cows are pure bred; and in the Illinois area also it rises from $989 on farms where the cows are of mixed grade to $1,059 on farms where the cows are part pure bred. This shows definitely that the introduction of pure blood into the herd increases the profit of the tenant. In the Wisconsin area the landlord's percentage on his investment rises from 2.8 on the farms where the cows are of mixed grade, through 3.6 where they are grade Holsteins, and 5 where they are part pure bred, to 5.7 per cent where they are all pure-bred Holsteins. For the reason stated above, no conclusion can be drawn concerning the profitableness to the landlord of maintaining pure-bred herds in the Illinois region, but it is evident that on the farms in question the raising of pure-bred cows was more profitable in the Wisconsin group than in that of Illinois.

INFLUENCE OF THE SHORT AND LONG TERM LEASE ON LENGTH OF TENURE.

With a view of exhibiting the effects of the short and of the long term lease on the length of individual tenure, Table X was prepared.

TABLE X.—*Relation of short- and long-term leases to length of tenure.*

Item.	Years in lease period.						
	84 Wisconsin farms.			59 Illinois farms.			
	1	2	3	1	2	3	5
Number of farms	64	6	14	37	1	13	8
Number of farms, averaged	64	20		38		21	
Years on this farm	4.2	2.2		7		4.4	

It is seen from the table that in both groups the average length of time the tenant has been on the farm is longer on farms with short-term leases than it is on farms with long-term leases.

In the Wisconsin group tenants with 1-year leases had been on the farm an average of 4.2 years, while those with longer-term leases had been on the farm an average of only 2.2 years. Likewise, in the Illinois group tenants with short-term leases had been on their farms an average of 7 years, while those with long-term leases had been on their farms an average of but 4.4 years.

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